CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Ogilvie Gulch II Timber Sale
Proposed Implementation Date:	July 2013
Proponent:	Montana DNRC, 8001 N. Montana Ave., Helena, MT 59602
Location:	Section 1, 12 & 13, T12N, R7W
County:	Lewis & Clark
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Type of Action: ***Ogilvie Gulch II Timber Sale***

The Montana Department of Natural Resources and Conservation (DNRC), Helena Unit is proposing a timber sale on State trust land in Lewis & Clark County near Canyon Creek, Montana. Under the proposed action, DNRC would harvest approximately 1.2 MMBF of sawlog material from 218 acres, in Sections 1, 12, & 13, T12N, R7W (with road use also in section 11, T12N, R7W). Timber would be harvested using ground based logging systems. **(See Attachment 1 for detailed project map.)**

Noxious weed monitoring would occur following the proposed harvest treatments. Subsequent weed spraying would take place if new weed infestations were discovered.

Construction of new road systems on both State (1.87 miles) and Federal lands (1,728 feet) would be necessary to access the northern most sale units. A good portion of the new construction would be on favorable slopes, through flat open parks, and along existing two-track roads. These as well as a portion of the existing roads are behind locked gates on USFS property.

The proposed action could be implemented as early as July 1, 2013 and would be completed before June 30, 2015.

Purpose of Action:

- **Generate revenue for the State Trust.** Harvesting approximately 1.2 MMBF of primarily Douglas-fir and lodgepole pine saw timber.
- **Established regeneration through patch clearcuts and shelterwood harvest.** Harvesting Douglas-fir and lodgepole pine in irregular shaped patches should promote regeneration. Leave islands of Douglas-fir in addition to, Douglas-fir shelterwood harvests, should provide ample seed and enough shade to establish regeneration.
- **Manage stand change, to maintain future income potential for the Trust.**

The lands involved in this proposed project are held by the State of Montana in trust for the support of both the ***Common School Trust*** as described above (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measures of reasonable and legitimate return over the long run for these beneficiary institutions (Section 77-1-202, MCA).

The State Forest Lands Management Plan (SFLMP) outlines DNRC's philosophy for management of state forested Trust Lands. DNRC Forest Management Rules (ARM 36.11.401 through 456) are the specific legal resource management standards and measures under which DNRC implements the SFLMP. The Forest Management Rules were adopted in

March 2003 and provide the legal framework for DNRC project-level decisions and provide field personnel with consistent policy and directions for managing forested State trust lands. Project design considerations and mitigations developed for this project must comply with the Forest Management Rules.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

History of Planning Process:

A scoping letter was sent out *March 23, 2012* to interested parties on the DNRC, Helena Unit "Timber Sale Scoping List". The "Initial Proposal" letter briefly outlined project needs and objectives as well as existing landscape conditions.

Adjacent landowners also received the scoping letter. In addition, current land-use information on State Trust property was obtained from the DNRC Trust Lands Management System.

A legal notice was published in the *Helena Independent Record* in *March, 2012*. Comments were to be directed to the DNRC Helena Unit office by *March 23, 2012*.

Issues Studied:

The DNRC carefully considers public comments that are received as an integral part of the scoping process. Written comments were received from The Confederated Salish and Kootenai Tribes of the Flathead Nation and Todd Burger, adjacent land owner. A complete listing of persons, groups, and agencies that received an initial proposal, as well as written comments received in response are on file at the Helena Unit DNRC office located at 8001 North Montana Avenue, Helena, Montana 59602.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The USDA Forest Service, Helena National Forest, Helena Ranger District has issued a Road Use Permit for a period of two years (2013 and 2014) to the Montana DNRC in order to utilize 2.94 miles of existing road templates in Cellars and Ogilvie gulches and along the ridge dividing the two. This permit also covers construction of 1729 feet of new, temporary road in Ogilvie gulch.

A Stream Preservation Act Permit (124 Permit) is required for improvements to an existing stream crossing that DNRC is required to make under the conditions of the Forest Service road use agreement. Montana Department of Fish, Wildlife and Parks has jurisdiction over these permits.

The DNRC is classified as a major open burner by the Montana Department of Environmental Quality (DEQ), and is issued a permit from the DEQ to conduct burning activities on State lands managed by the DNRC. As a major open burning permit holder, DNRC agrees to comply with all of the limitations and conditions of the permit.

The DNRC is a member of the Montana/Idaho Airshed Group which was formed to coordinate burning activities among members in order to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction. As a member of the Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit in Missoula, MT.

DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands Habitat Conservation Plan (HCP) and the associated Incidental Take Permit (Permit) that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at www.dnrc.mt.gov/HCP."

3. ALTERNATIVES CONSIDERED:

No Action – No timber harvest would take place at this time. Current uses would continue.

Action- Harvest approximately 1.2MMBF of sawlog material from 218 acres using an even-aged silviculture method of patch clearcutting and shelterwood harvesting, to regenerate Douglas-fir and lodgepole pine.

The use of existing road on private (226 feet), State (1.70 miles), and Federal Forest Service lands (2.62 miles) provides access to a majority of the three harvest units. Various maintenance and Best Management Practices (BMP) would be implemented along this route.

Construction of new road systems on both State (1.87 miles) and Federal lands (1,728 feet) would be necessary to access the northern most sale units. A good portion of the new construction would be on favorable slopes, through flat open parks, and along existing two-track roads. These as well as a portion of the existing roads are behind locked gates on USFS property.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The Ogilvie II project area was field reviewed on August 21, 2012 by the Forest Management Bureau's soil scientist to verify soil map unit descriptions and to identify areas potentially requiring project specific mitigation measures to provide adequate soil resource protection during implementation of the proposed actions.

Existing Conditions

The following table contains the various soil map units within the areas proposed for harvest along with the risk of erosion, compaction and displacement from the proposed actions.

Soil Map Unit	Area (Acres)	Map Unit Name	Risk of Management Impacts		
			Erosion	Compaction	Displacement
61E	2.6	Holter-Castner channery loams, 8 to 45 percent slopes	Low	Low	Moderate
85E	20.2	Whitecow channery loam, 8 to 35 percent slopes	Low	Low	Low
85F	2.5	Whitecow channery loam, 35 to 60 percent slopes	Low	Low	Moderate
285F	25.3	Whitecow, cool-Trapps, dry channery loams, 25 to 60 percent slopes	Low	Moderate	Moderate
590E	83.2	Helmville channery loam, warm, 15 to 30 percent slopes	Low	Low	Low
590F	81.2	Helmville channery loam, warm, 30 to 60 percent slopes	Low	Low	Moderate

No unique or fragile soil resources were identified within the areas proposed for harvest activities. No slope stability issues were observed within harvest units or along the locations of proposed new road construction. The site productivity of the project area is rather low due to low precipitation (18-20"), short growing season and the low productivity of the soils. The forest stands within identified harvest units have experienced high rates of mortality from Mountain Pine Beatle and Spruce Budworm outbreaks. Most trees are in "gray" phase with needles fallen to the forest floor. Volumes of coarse and fine woody material ranged from 5-20 tons per acre dependant on habitat type, severity of mortality and aspect. This volume of woody material is within the natural range of conditions typically found in these forest types (Graham et al. 1994).

Previous timber harvest exists within the project area but no previous commercial timber harvest has occurred in the proposed harvest units. Historic harvest units (1990's) have regenerated well with no obvious signs of productivity loss from these previous entries.

Project Mitigation Measures

- Limit equipment operations to periods when soils are relatively dry, (less than 20% soil moisture), frozen or snow covered (12 inches packed or 18 inches unconsolidated) to minimize soil compaction and rutting, and to maintain drainage features on road surfaces, primary skid trails and landing locations.
- Ground-based logging equipment (tractors, skidders, and mechanical harvesters) shall be limited to slopes less than 40% throughout the entire project area.
- The Forest Officer shall approve a plan for felling, yarding and landing location in each harvest unit prior to the start of operations in the unit. The locations and spacing of skid trails and landings shall be designated and approved by the Forest Officer prior to operations and skid trails will not be spaced less than 50 feet. Existing skid trails will be reused if properly located and complies with BMP's.
- Levels of coarse and fine woody material will be retained on site as prescribed by the forest officer and recommended by the project soil scientist using guidance from the best available science (Graham et al. 1994). 10-15 tons/acre of material >3" is recommended for the Ogilvie II Timber Sale project area with as many needles and fine material retained as possible.

Environmental Effects

The proposed actions of the Ogilvie II timber sale present a moderate risk of low level direct and indirect impacts to the soil resource from erosion, displacement and compaction. If the above outlined mitigation measures are strictly adhered to during project activities, conclusions from DRNC soil monitoring projects (DNRC, 2010) on similar projects can accurately forecast that detrimental soil disturbance would remain below 15% of individual harvest units and that site productivity would be maintained.

The land use on approximately 5.3 acres of land would be permanently converted from forest products and/or rangeland grazing to transportation by the construction of 2.20 miles of new road assuming a disturbance width of approximately 20 feet.

Cumulative effects by definition are the collective impacts on the human environment of the proposed action when considered in conjunction with other past, present and future actions related to the proposed action by location or generic type. For an impact to soil resources to be cumulative they must overlap a least twice in both time and space. No previous harvest activities have occurred in the proposed harvest units thus eliminating the potential for cumulative effects.

Citations

DNRC, 2010. DNRC compiled soils monitoring report on timber harvest projects, 1988-2005. Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, MT.

Graham, R.T. et al., 1994. Managing coarse woody debris in forests of the Rocky Mountains. In: USDA and F. Service (Editors). Ogden, UT: Intermountain Research Station, pp. 12p.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The Ogilvie II project area was field reviewed on August 21, 2012 by the Forest Management Bureau's hydrologist to assess the existing conditions of the watershed and to determine the potential impact of the proposed actions. Observations made in the field were also used to identify recommended site-specific mitigation measures designed to protect and minimize the risk of impacts to water resources. A similar review and analysis in this project area and affected watersheds in 1992 and 2004.

Existing Conditions

The proposed actions are located within the Cellar Gulch, Ogilvie Gulch, Unnamed tributary, and Marsh Creek Watersheds. All of these watersheds are tributary to Little Prickly Pear Creek in the Missouri River Basin. There are no streams or other bodies of water that support fish located within or in the immediate vicinity of the existing haul route, the proposed harvest areas or the proposed new road location. None of the streams draining the immediate harvest area or in the vicinity of the proposed haul route have direct channel discharge to streams supporting a fishery. Therefore, impacts to fisheries will not be addressed in this report. This report will focus on risk of direct, indirect and cumulative risks of increased sediment delivery and the risks of cumulative increases in water yield.

This portion of the Missouri River Drainage is classified as B-1 under the Montana Surface Water Quality Standards. Existing and known beneficial uses of surface waters within the immediate project area and immediately downstream of the project area include water rights for irrigation and livestock water.

Little Prickly Pear Creek has been identified as an impaired stream the 2012 303(d) list published by the Montana Department of Environmental Quality. A TMDL is planned for the watershed in the near future. The stream was listed as impaired because the aquatic life beneficial uses were determined to only be partially supporting. Probable causes of impairment have been identified as alteration in streamside vegetation, alteration of flow regime, alteration of substrate habitat, sedimentation / siltation, and temperature. Probable sources include agriculture, riparian grazing, water diversions, forest roads and silvicultural activities.

Cellar Gulch is a 1st order tributary to Little Prickly Pear Creek. While the upper reaches of Cellar Gulch are perennial, the lower reaches are intermittent and ephemeral. In fact, all surface flows from the drainage are discontinuous with no direct delivery to Little Prickly Pear Creek. Any potential seasonal concentrated ephemeral runoff leaving the lower drainage appears to be totally intercepted by an irrigation ditch and hay pastures before reaching Little Prickly Pear Creek. Proposed actions in this watershed are limited to use of an existing road for access and hauling activities. This road is located on State, Helena National Forest and private ownership. While this road is located near the drainage bottom, most of it is still adequately buffered from the stream channel. The southwest road approach to the existing culvert stream crossing of Cellar Gulch does not have adequate surface relief drainage, which results in concentration of road surface drainage directly to the stream crossing site. There is high potential for sediment delivery to occur at this site. Approximately 130 acres of timber harvest and 0.8 miles of new road construction are planned in the Ogilvie Gulch watershed. Ogilvie Gulch is a 2nd order tributary to Little Prickly Pear Creek. Several reaches of Ogilvie Gulch are spring fed and perennial. However, stream flows in the very lower portion of the watershed are intermittent and ephemeral. There is not direct channelized surface delivery to Little Prickly Pear Creek.

Approximately 27 acres of timber harvest and 0.6 miles of new road construction are proposed in the upper headwaters of an unnamed 1st order intermittent tributary to Little Prickly Pear Creek. There are no stream channels within the area of this watershed affected by the proposed activities. While the watershed contains several isolated springs fed segments of poorly defined stream channel, there is no direct channel delivery to Little Prickly Pear Creek.

Approximately 61 acres of timber harvest and 0.8 miles of new road construction are planned in the Marsh Creek watershed. These activities are planned in an area of moderate slopes located high on a ridge top well buffered from

Marsh Creek itself. There are no stream channels draining this portion of the watershed and there are no ephemeral drainage features with direct connectivity to Marsh Creek or other bodies of water.

Environmental Effects

The proposed actions present a low risk of direct, indirect or cumulative impacts to water quality, water quantity and downstream beneficial uses within the affected watersheds. The existing road, while low standard, for the most part meets BMPs. Those segments not meeting BMPs will be improved or maintained to meet BMPs and reduce risk of erosion and sediment delivery. For example, the road surface drainage will be improved on the approach to the existing culvert crossing of Cellar Gulch. These measures will reduce the concentration of road surface drainage toward the crossing site and decrease the risk of sediment delivery to Cellar Gulch.

The proposed harvest areas and new road locations are well buffered for streams, springs and wetlands. No new stream crossings are included in the proposal. The proposed road crossings of ephemeral draws and swales are located on stable, moderate and well vegetated slopes. The draw and swale bottoms at these sites do not have stream channels or evidence concentrated flows, and they are well vegetated and full of large woody debris. None of the ephemeral drainage features within the proposed harvest units have direct delivery to stream channels or other bodies of water. Application of BMPs, site specific design and other mitigation measures are expected to minimize the risk or erosion and subsequent sediment delivery. All of the proposed actions have low risk of down slope sediment delivery to streams or other bodies of water.

There is low risk of cumulative watershed effects to result from the proposed actions. As stated earlier the proposed harvest areas and road locations are well buffered from streams. Existing segments of road not meeting BMPs will be improved. Therefore, there is low risk of increased levels of cumulative sediment delivery to streams.

The proposed timber harvests are located in areas with relatively low levels of precipitation and subsequently low levels of runoff. The amount of forested area within the affected watersheds is likely higher than the average for the range of natural occurring conditions due to moderate levels of forest crown removal, fire suppression and extensive amounts of range encroachment. Therefore, it is unlikely that the proposed levels of timber harvest would measurable affect off site water yield in any of the affected watersheds. There is low risk of impacts due to cumulative effects of water yield increase or changes in timing of runoff.

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6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The project is located in Montana State Airshed 6 which encompasses all of Lewis & Clark County. Under the Action Alternative, potential post-harvest burning of logging slash would produce some particulate matter. The DNRC would make all attempts to utilize logging slash to minimize the amount of burning needed. Burning within the project area would be short in duration and would be conducted when conditions favored good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. DNRC would burn only on approved days.

Harvesting and log hauling could create dust which may affect the air quality within the project area and along the haul route. Harvest operations would be short in duration thereby minimizing dust dispersal within the local areas.

Direct, indirect, and cumulative effects to air quality due to slash pile burning, harvesting, and hauling associated with the proposed action are expected to be minimal.

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7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Timber harvesting on State Trust Lands within the Cellar and Ogilvie Gulch drainages has taken place several times in the past. Ogilvie Gulch Timber Sale (29 acres) was harvested in 1995, removing mostly Douglas-fir in small patch clearcuts. The openings that where created are well stocked today with Douglas-fir saplings.

Cellar Gulch Timber Sale, 55 acres in size removed Douglas-fir from three harvest units. The overstory was removed in two units to minimize impacts from western spruce budworm on advanced Douglas-fir regeneration, while a selection harvest was implemented on the third. A vegetative analysis evaluating elk habitat by cover types was developed for this sale, encompassing 10,187.41 acres. It looked at potential impacts of proposed timber harvesting on security cover for elk considering the amount of cutting that was done on USFS lands. The old USFS clearcuts are now fully stocked with pole sized lodgepole pine and Douglas-fir and security cover is no longer an issue.

The proposed Ogilvie Gulch II Timber Sale is approximately 218 acres in size and is divided into three units. The southernmost unit builds upon the previous Ogilvie Gulch Timber Sale, and removes more Douglas-fir once again using a patch clearcut system. The center unit will employ a shelterwood harvest leaving good quality dominate and co-dominate Douglas-fir while removing lodgepole pine and poor quality intermediate and suppressed Douglas-fir. The northern most unit is mostly lodgepole pine and poor quality Douglas-fir. Large Douglas-fir will remain scattered throughout this unit to provide a seed source and for visual aesthetics while opening up the stand to enhance lodgepole pine regeneration.

Mortality in Douglas-fir is prevalent in stands along Cellar Gulch due to western spruce budworm and Douglas-fir beetle infestations.

Existing noxious weeds are established along USFS access roads and are known to be in a couple of locations on State Trust Lands.

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8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Fisheries
There are no streams or other bodies of water that support fish located within or in the immediate vicinity of the existing haul route, the proposed harvest areas or the proposed new road location. None of the streams draining the immediate harvest area or in the vicinity of the proposed haul route have direct channel discharge to streams supporting a fishery. Therefore, no impacts to fisheries are anticipated under the proposed actions.

Big Game
A vegetative analysis evaluating elk habitat by cover types was developed for the Cellar Gulch Timber Sale and was approximately 10,187.41 acres in size. This Vegetative Analysis encompasses the proposed Ogilvie Gulch II Timber Sale area and looked at the potential impacts of past proposed timber harvesting on vegetative cover types. Due to the amount of advanced regeneration from previous timber sales on USFS and DNRC lands, drastic cover type changes are not expected with the implementation of the proposed Ogilvie Gulch II Timber Sale. Cumulative effects to wildlife and birds are not expected.

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9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Suitable habitat for several threatened and sensitive species occurs within the project area. Direct, indirect and cumulative effects were considered for each of these species and others known to occur on lands administered by the DNRC Central Land Office. Species considered in this analysis include: Bald Eagle, Black-Backed Woodpecker, Black-tailed

Prairie Dog, Flammulated Owl, Greater Sage-Grouse, Harlequin Duck, Mountain Plover, Northern Bog Lemming, Peregrine Falcon, Pileated Woodpecker, and Townsend's Big-Eared Bat.

See Attachment 2-Wildlife Checklist for detailed information about each species.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

The DNRC has no record of cultural resources within the project's area of potential effect. However, a professional inventory of cultural resources has not been conducted. If previously unknown, cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Because the scope and nature of this project is somewhat small, long lasting negative visual effects are not expected. The existing landform is mountainous with the harvest area being isolated behind a locked gate, accessed through private and federal property.

Since many of the sections surrounding the project area have been harvested in the past or have experience variable stand effects from wild fires, western spruce budworm, or Mountain Pine Beetle, the proposed action is not expected to greatly change the current visual aesthetics which already occur within the area. In fact, the impacts would be consistent with the surrounding landscape.

Direct, indirect, and cumulative aesthetic impacts associated with the proposed action are thus expected to be minimal and relatively short in duration.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Demands on land, water, air or energy is not expected to increase in intensity as a result of timber harvesting on State Trust Lands.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract.

Cellar Gulch Timber Sale
Ogilvie Gulch Timber Sale

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

No measurable direct, indirect, or cumulative effects would be expected from the implementation of the project.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

No measurable direct, indirect, or cumulative effects would be expected from the implementation of the project.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

People are currently employed in the wood products industry in this region of Montana. No measurable direct, indirect, and cumulative impacts would be expected on employment from the execution of this alternative action due to the relatively small DNRC timber sale program.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

People are currently paying taxes on monies generated from the wood products industry in this region of Montana. No measurable direct, indirect, and cumulative impacts would be expected on tax revenues from the execution of this alternative action due to the relatively small DNRC timber sale program.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

There would be no measurable direct, indirect, and cumulative impacts related to the demand for government services due to the relatively small DNRC timber sale program. Short term impacts to traffic as well as a temporary increase of people to the area may result, as both the DNRC and private land owner are planning timber harvests in this area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There are currently no locally adopted environmental plans or goals in this area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Persons having a valid State Trust Land Recreational Use Permit are welcome to hike or perform other approved outdoor activities. Public access to State lands is via Cellar Gulch road in Section 13, T12N, R7W. Sections 1, 12, T12N, R7W can be accessed through Federal lands behind a locked gate.

Implementation of the proposed alternative should have minimal effect on recreational opportunities.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There will be no measurable direct, indirect, and cumulative impacts related to population and housing due to the relatively small nature of the DNRC timber sale program. Personnel required to execute this project are currently employed in this region of Montana.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Not Applicable.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Not Applicable.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Economic Cost/Return Associated With Project:

The action being proposed not only takes into consideration silvicultural and biological characteristics of managing this forested stand, but the economic viability of implementing such a project. State timber sales are sold by a sealed written bidding process, to secure the highest stumpage return to the Trust. Minimum bids are estimated by examining market conditions and typical production costs immediately prior to the offer of sale. Prospective bidders must meet or exceed the minimum bid and all timber sales sold are required to return a positive return to the Trust.

Future Management Options:

Implementation of this project should increase the managed forest base on State Trust Lands. This would most likely result in the production of a healthier forested stand that would bring in additional revenue to the Trust over the long term.

Current Activities:

Grazing of State Trust Lands in this area currently brings in $1,919.70 per year (243 AUM's x $7.90). Some revenue percentage from the General Recreational Use License as well as the newly adopted Conservation License may also be attributed to this tract, although this revenue probably is quite small.

No negative direct, indirect, or cumulative economic or social effects are anticipated as a result of the proposed action.

EA Checklist Prepared By:	Name:	Shawn Morgan	Date: 03/07/2013
	Title:	DNRC, Helena Unit Forester	

V. FINDING

25. ALTERNATIVE SELECTED: The action alternative best meets the goals and objectives of the proposal.

26. SIGNIFICANCE OF POTENTIAL IMPACTS: No un-acceptable impacts are anticipated with implementation of the action alternative.

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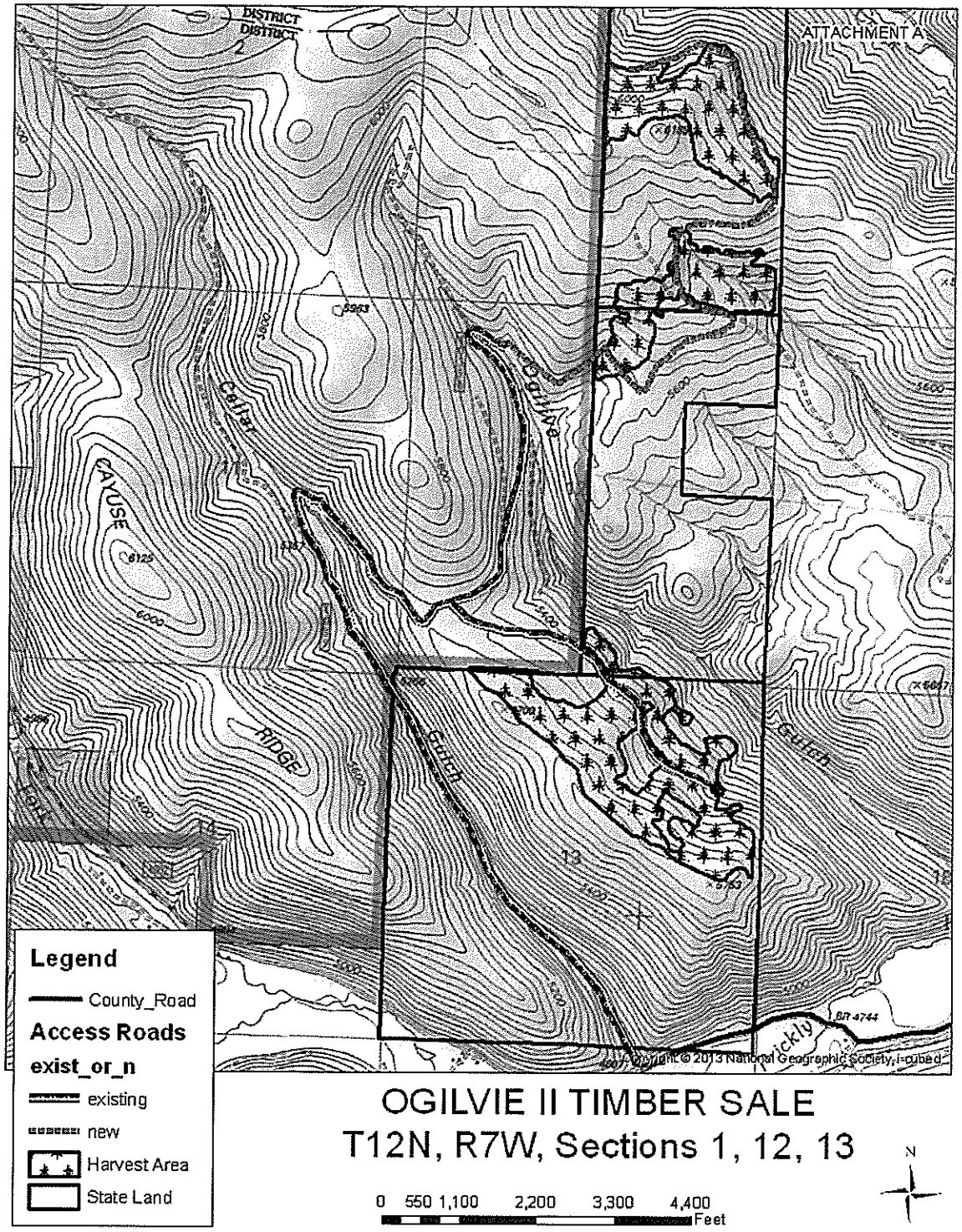
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Approved By:	Name:	Andy Burgoyne	
	Title:	Helena Unit Manager	
Signature:	S. Andy Burgoyne	Date:	6/17/13



OGILVIE II TIMBER SALE
T12N, R7W, Sections 1, 12, 13

CHECKLIST FOR ENDANGERED, THREATENED AND SENSITIVE SPECIES
Pertains to Section II. 9. of the DS-252 DNRC Environmental Checklist
(Rev. August 1, 2007)
CENTRAL LAND OFFICE

Threatened and Endangered Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Grizzly Bear (*Ursus arctos*) Habitat: recovery areas, security from human activity	[Y] Grizzly bear habitat, as identified in the Habitat Conservation Plan (HCP) is considered non-recovery occupied (GB-NR). Commitments to minimize new road construction, maintaining restricted status of roads that would be used, providing topographic breaks while designing new clearcut units and seed tree cuttings, as well as spring habitat elevation requirements have been considered and incorporated. Low risk of direct, indirect, or cumulative effect to Grizzly bears would be anticipated.
Gray Wolf (*Canis lupus*) Habitat: ample big game pops., security from human activity	[Y] Wolves are common in western Montana and therefore could travel through or den on or near the project area. Big game species are the primary prey for wolves, and negligible effects to big game through the implementation of this project would be anticipated. No Wolf den or rendezvous sites are known to occur in the vicinity. Standard contract stipulations would address potential impacts to wolves using such areas should they be found in the project area. Due to minimal anticipated changes in big game use, lack of known wolf use, and inclusion of mitigation clauses in the contract, negligible direct, indirect, or cumulative effects to wolves would be anticipated.
Lynx (*Felis lynx*) Habitat: mosaics--dense sapling and old forest >5,000 ft. elev.	[Y] Approximately 416 acres of suitable lynx habitat occur in the project area. Of these acres, 208 would receive harvest and would be altered to temporary non-suitable habitat. 208 acres would remain unaffected. Habitats on the project area are comprised of relatively marginal dry forest types and they occur along foothill ecotones limiting their suitability. Considerable acreage of well-stocked mature forest habitat occurs west of the project area, providing potentially suitable habitat for lynx. Retention of large diameter downed logs, snags and snag recruits, and a connective network of suitable lynx habitat along RMZ's, ridge tops, and saddles have been considered.

	Minimal direct, indirect, or cumulative effects to Lynx would be anticipated. [I got the 200 acre number from the HCP Checklist]

DNRC Sensitive Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Bald Eagle (*Haliaeetus leucocephalus*) Habitat: late-successional forest <1 mile from open water	[N] No known eagle nests or large water bodies suitable for use by nesting bald eagles occur within a mile of the project area. Thus, no direct, indirect, or cumulative effects would be expected.
Black-Backed Woodpecker (*Picoides arcticus*) Habitat: mature to old burned or beetle-infested forest	[N] Black-backed Woodpecker habitat may occur at low levels throughout this Douglas-fir, lodgepole pine habitat. Anticipated direct, indirect and cumulative effects should be minimal.
Black-tailed Prairie Dog (*Cynomys ludoviscianus*) Habitat: Prairie, shortgrass prairie, badlands	[N] No suitable flat, open grasslands and shrub/grasslands with low, relatively sparse vegetation occur in the project area. Thus, no direct, indirect, or cumulative effects would be expected.
Flammulated Owl (*Otus flammeolus*) Habitat: late-successional ponderosa pine and Doug.-fir forest	[Y] This species prefers seral ponderosa pine stands or secondarily Douglas-fir timber types where historical fire regimes occurred on the landscape. Favored stands are usually found on warm, dry slopes with basal areas of 35 to 80 ft.^{2}/acre. Douglas-fir leave islands and residual seed trees should provide favored habitat requirements of the Flammulated Owl. Because the small amount of acreage being harvested on the landscape, minimal risk of direct, indirect, or cumulative effects would be expected.
Greater Sage-grouse (*Centrocercus urophasianus*) Habitat: sagebrush semi-desert	[N] Sagebrush is the preferred habitat for Greater Sage-grouse. Because sagebrush does not occur in the project area, no direct, indirect, or cumulative effects would be expected.
Harlequin Duck (*Histrionicus histrionicus*) Habitat: white-water streams, boulder and cobble	[N] No suitable high gradient streams occur in the project area. Thus, no direct, indirect, or cumulative effects would be

substrates	expected.
Mountain Plover (*Charadrius montanus*) Habitat: short-grass prairie, alkaline flats, prairie dog towns	[N] Primary habitat for the Mountain Plover in Montana, during the breeding season includes heavily grazed, shortgrass prairie sites. Because the shortgrass prairie sites do not occur in the project area, no direct, indirect, or cumulative effects would be expected.
Northern Bog Lemming (*Synaptomys borealis*) Habitat: sphagnum meadows, bogs, fens with thick moss mats	[N] No suitable wet meadows, fens, or bog-like environments occur in the project area. Thus, no direct, indirect, or cumulative effects would be expected.
Peregrine Falcon (*Falco peregrinus*) Habitat: cliff features near open foraging areas and/or wetlands	[N] Nests typically are situated on ledges of vertical cliffs, often with a sheltering overhang. Ideal locations include undisturbed areas with a wide view, near water, and close to plentiful prey. There are some relatively small cliff features within distance of the project area, but they are not likely to provide suitable nesting sites for peregrines. (nest sites usually occur on really substantial cliff features, none were observed within a mile of the project.) Thus no direct, indirect or cumulative effects to peregrines would be anticipated.
Pileated Woodpecker (*Dryocopus pileatus*) Habitat: late-successional ponderosa pine and larch-fir forest	[Y] Preferred habitat is late successional stages of coniferous or deciduous forest, but also younger forests that have scattered, large dead trees. Diet consists primarily of wood-dwelling ants and beetles that are extracted from down woody material and from standing live and dead trees. Desirable habitat may be found due to the prolific mountain pine beetle outbreak throughout the Helena Unit. Although a low level use by Pileated Woodpecker could occur, the landscape-scale abundance of beetle infested forests, and the relatively small size of this project, anticipated direct, indirect and cumulative effects should be minimal.
Townsend's Big-Eared Bat (*Plecotus townsendii*)	[N] No mines or caves occur in the project area or close vicinity that would be suitable for use by Townsend's big-eared

Habitat: caves, caverns, old mines	bats. Thus, no direct, indirect, or cumulative effects would be anticipated.
Other Species evaluated in project area	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur (Explain Below)
Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi)* Habitat: *cool streams with pool habitat*	[N] Cool streams do not occur in the project area. Thus, no direct, indirect, or cumulative effects to westslope would be anticipated. [

Mitigations include:

1. Cease all operations if a threatened or endangered species is encountered. Consult a DNRC biologist and develop additional mitigations that are consistent with the administrative rules for managing Threatened and Endangered Species (ARM 36.11.428 through 36.11.435).
2. Close skid trails opened with proposed activities to reduce the potential for unauthorized motor vehicle use.
3. Manage for snags, snag recruits, and coarse woody debris according to ARM 36.11.411 through 36.11.414, particularly favoring Ponderosa Pine.